

16 recites the further feature wherein the fit is a force fit. Syverson does not show a separate housing inside the conveyor roller. It was said in the Office Action that De Fillipis suggested that the motor would be assembled within a conveyor roller. De Fillipis does not suggest an application such as a conveyor roller. Its magnets are spaced apart and would require additional means to hold them securely in place.

Actually, De Fillipis is not unique in the respect cited in the Office Action. Von der Heide also shows permanent magnets inside of a motor housing, and many of the references show motors inside of conveyor rollers (See Agnoff, U.S. Pat. No. 5,088,596; Kato, U.S. Pat. No. 5,145,169; Werner, U.S. Pat. No. 5,413,209; Siemens, DE 24 34 220; Tokyo Electric Co., JP Pub. No. 4161050 to name several examples). The presence of some housing for the magnets is always necessary.

This is not evidence of assembling the housing by a contact fit inside the conveyor roller.

In this regard, the Office Action questioned whether securing by a force fit (claim 15) was a structural limitation, when it said that the "method of forming the device is not germane." It is submitted that with the word "secured" the limitation is structural and is just as definite as language such as "fastened." Because there are no additional parts provided by the contact fit or press fit, such additional parts cannot be claimed, but the limitation is structural. If the Examiner believes a different form of the language is more appropriate, the Applicant would be amenable to a suggested Examiner's amendment on this issue.

Claim 13 now recites that the motor is supported in bearings that allow the motor to extend part way along the roller. The recitation of the bearings is new to claim 13, and this arrangement is not shown in the art. Support for these recitations is found at page 6, lines 25-35 and page 7, lines 25-33 of the specification.

Shiba et al., U.S. Pat. No. 5,534,805, was cited against canceled claims 3-4 as showing a motor extending part way along the roller. However, Shiba does not provide bearings on opposite sides of the motor towards one end of the roller

where such bearings would support the motor and provide the air gap.

Shiba does not provide the separate motor housing having a contact fit inside the conveyor roller.

Thus, there is no collective art to suggest the combination of a contact fit while providing bearings for the motor and the motor extending only part way along the length of the conveyor roller (claim 13). As stated in the Remarks following the last Amendment, this provides a construction for a conveyor roller motor that is better able to withstand bending stresses and deflection forces encountered during operation of a conveyor system. There is no collective art to reject the claimed combination of securing the motor housing in the conveyor roller, providing the bearings recited in claim 14, and wherein the motor extends over only part of the roller, and wherein there is a direct drive with no gearing arrangement (claim 15).

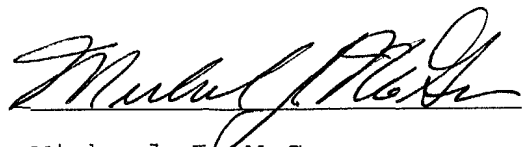
Claims 16-22 have been redrafted to depend directly or indirectly from claims 13 and 14 and are allowable for at least the same reasons as claims 13 and 14.

Conclusion

In view of the Amendment and Remarks, reconsideration of the application is respectfully requested. After the Amendment, claims 13-22 are now pending, and a Notice of Allowance for these claims is earnestly solicited.

Respectfully submitted,

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